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Federal Communications Commission

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LATITUDE LONGITUDE

Broadcast Engineer 904-427-9000 2596 STATE ROAD 44 NEW SMYRNA BEACH, FL 32069

Richard Van Zandt

TECHNICAL STATEMENT CONCERNING THE APPLICATION OF JOY PUBLIC BROADCASTING CORP. FOR AUTHORITY TO CONSTRUCT A NEW NONCOMMERCIAL EDUCATIONAL FM BROADCAST STATION AT LINCOLN, NEBRASKA BPED-881205MB

On January 3, 1990 The Chronicle Publishing Comapny, licensee of television station WOWT, filed a Petition to Deny the above captioned application for a new FM radio station. This statement is in response to that petition.

Joy Public Broadcasting Corporation proposes to operate with an ERP of 5 kilowatts using Vertical Polarization and a HAAT of 96 meters. This new facility would provide Lincoln, Nebraska, with a new FM service offering programming that is new and unique to the community. Programming that is needed.

The applicant and this engineer understands the concerns of WOWT TV-6. Therefore, in order to comply with Section 73.525 the applicant proposed locating the transmitting antenna well outside the Lincoln city limits and using Vertical Polarization.

We believe that the concerns of WOWT as outlined by the engineering firm of du Treil, Lundin, & Rackley, Inc. can be satisfied. They suggested that "pattern measurements" be made. This had already been considered and discussed with the antenna manufacturer.

The applicant plans to use a JAMPRO JSVP-1 Vertically Polarized FM Antenna. The antenna would be designed specifically for the tower; after antenna construction the exact antenna will be sidemounted on a tower which duplicates the customer's tower. Jampro will then take HPOL and VPOL patterns with the antenna mounted at various positions on the tower. Specifications for the Jampro Antenna and Pattern Measurement Service are attached. With the information from the Pattern Measurement Service the applicant will then mount the manufactured antenna to comply with the CP. The applicant will retain the service of a registered surveyer to certify that the antenna has been mounted in the proper direction. (as performed with directional antennas)

While the Pattern Measurement Service would be an extra cost to the applicant the applicant is willing to make this expenditure in order to show good will and compliance. The applicant requests that the Antenna Measurement Service be conducted during construction of the actual FM antenna to be used.

The engineering statement of du Treil, Lundin, & Rackley, Inc. stated that "the construction permit could contain a condition that the showing be made". We believe this to be a fair request. Joy Public Broadcasting Corporation will show compliance prior to receiving a License for the new FM station.

In summary, the Joy construction permit should be processed without further delay. Joy will provide Pattern Measurements and show compliance with CFR 73.525 prior to receiving a License.

Respectfully,

Richard Van Zandt

January 25, 1990



6939 Power Inn Road, P.O. Box 28425, Sacramento, CA 95828 (916) 383-1177 Telex: 377321

January 21, 1987

WELCOME TO JAMPRO ANTENNAS, INC. Introduction

JAMPRO ANTENNAS INC.

Jampro has been designing and manufacturing broadcast antennas in Sacramento, California U.S.A. for over 29 years. Jampro is well known in the industry as an agressive and quality oriented company specializing in antennas and associated components. Our products are being used world wide. More than 1,800 antennas have been sold since the company was founded in 1958. Jampro is currently developing new state of the art antennas for broadcast applications. We have always lead the industry with innovative concepts and ideas. Jampro is the leading company in the United States that specializes in all types of antennas from AM arrays to superpower UHF antennas. Jampro will continue to supply the United States and all the world with high quality, competitivly priced, and up to date designs for your needs.

2) STAFF

PRESIDENT-OWNER (22 years with Jampro and Broadcasting)
James E. Olver

VICE-PRESIDENT-OWNER (8 years in Broadcast and Tower design)
Alex Perchevitch
Sales Engineer-FM

CONSULTING ENGINEER (18 year association with Jampro)
Dr. Ray Du Hamel
Antenna Design

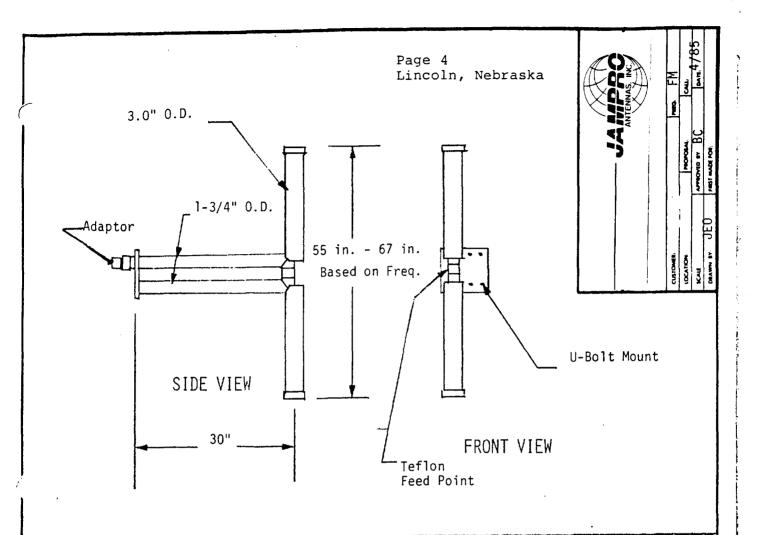
ANTENNA DESIGN ENGINEER (8 years in Antenna Design) Ali Mahnad PHD Candidate-Antenna Design

SALES ENGINEER (40 years in Broadcast industry)
Bill Cunningham-TV

DIRECTOR OF LATIN AMERICAN SALES (3 years with Jampro)
Carlos Bouza

CONTROLLER (14 years in Broadcast Accounting)
Alan Acrell

PRODUCTION MANAGER (5 years with Jampro)
Mark Cunningham-Traveling and climbing Technician



SPECIFICATIONS

Antenna Type

JVD Vertical Polarized Dipole

Frequency

Any single frequency from 88 - 108 MHz

Bandwidth

1.1:1 or better \pm KHz from carrier frequency

Materials

Brass, copper and teflon

Input Power Rating

10 KW

Input

1-5/8, L.C., Type N, BNC

Gain

1.0 with respect to dipole; 0.0 dB

Mounting

U-Bolt Mount (U-Bolts supplied)

Weight

25 lbs.

Windload

76 lbs. @ 50 psf (no ice); 88 MHz

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JAMPRO ANTENNAS, INC.
PATTERN MEASURE SERVICE FOR FM

To provide the FM Broadcaster with information to base his antenna installation, Jampro has provided this pattern measure service for several years. Basically, it provides ten measured patterns, made with full scale range measurements, and the antenna mounted in as many different positions on the tower. Due to the fact that tower dimensions affect antenna radiation patterns in varying respects, this service takes away much of the guess work in the decision on antenna orientation.

The basic cost of this service: \$ 2,150.00

Specifications on the job:

- 1. Jampro antennas will use one bay of our antenna tuned to the job frequency.
- This antenna will be mounted on one section of a tower which duplicates the customer's tower. All ladders, coaxial lines, conduits and other materials in the antenna aperture will be duplicated in this test.
 - Many tower models are in stock at Jampro. If necessary to duplicate the customer's tower by new construction, there will be a charge made for this. It is based on time plus materials, and may add \$ 1,000 to \$ 2,000 to job cost.
- 3. Using a leg-mount bracket, five HPOL and VPOL patterns will be measured and charted with the antenna oriented in five different directions with respect to the tower. These will vary from right angle with respect to the left face to a similar position with respect to the right face of the tower.
 - Then with a special length leg-mount bracket the bay will be spaced farther out from the tower and the five measurements above will be repeated.
- 4. This data will be given to the station for mounting and tuning decision. Express mail, facsimile or other means can be used.
- 5. In the event the station desires further experimentation, this may be arranged, at additional cost usually \$ 1,500 per day.

Call Factory Sales for further information The station accepts responsibility for their choice of antenna mounting in observance of FCC regulations regarding directional antennas.